

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-349970

(43)Date of publication of application : 21.12.1999

(51)Int.Cl.

C10M105/18  
C10M107/34  
F25B 1/00  
// C10N 40:30

(21)Application number : 10-165025

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(22)Date of filing : 12.06.1998

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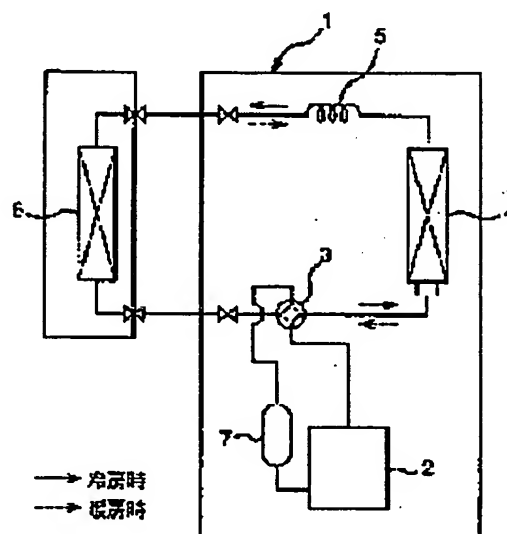
## (54) REFRIGERATING MACHINE OIL AND REFRIGERATION UNIT

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To obtain a refrigerating machine oil securing its lubricity when used together with a HC-based refrigerant and enabling the amount of the refrigerant to be suppressed.

**SOLUTION:** This refrigerating machine oil to be used together with a HC-based cooling medium in the compressor 2 of an air conditioning machine 1 is a composition I, II, III or IV, shown by the respective chemical formulas described below, or a mixture thereof.

Thereby, this machine oil affords such advantages as to lower the solubility of the cooling medium therein to effect prevention of decreasing its lubricity in association with the decrease in viscosity and reduce the unnecessary amount of the cooling medium to be used. composition I:  $R1-(CH_2CH_2O)_1-R5$ , composition II:  $R2-[CH(CH_3)CH_2O]_m-R6$ , composition III:  $R3-(CH_2CH_2O)_o[CH(CH_3)CH_2O]_p-R7$ , composition IV:  $R4-[CH(OR_9)CH_2]_n-R8$  where, (I), (m), (n), (o), (p) are each a natural number, R1 to R4 are each H, OH, a 1-8C hydrocarbon group or alkoxy group, R5 to R8 are each the same as R1 to R4, respectively, except OH, R9 is H or a 1-4C alkyl group.



## LEGAL STATUS

[Date of request for examination]

27.04.2005

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision  
of rejection]

[Date of requesting appeal against examiner's  
decision of rejection]

[Date of extinction of right]

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